Chained in place, buoys suffer constant damages from their harsh environment. The U.S. Coast Guard is responsible for their maintenance, replacement and monitoring.

BM3 Patrick Hopkins takes readings off the ship's sextant for the day's journey. Juniper is responsible for over 200 buoys from Sandy Hook, NJ to Cape Cod.

USCGC Juniper (WLB 201) Commanding Officer LCDR Rick Wester assists LTJG Jeannette Killen plot their course while preparing to leave State Pier in New London Friday, February 1, 2008. Juniper is the first cutter to use fully electronic charting.

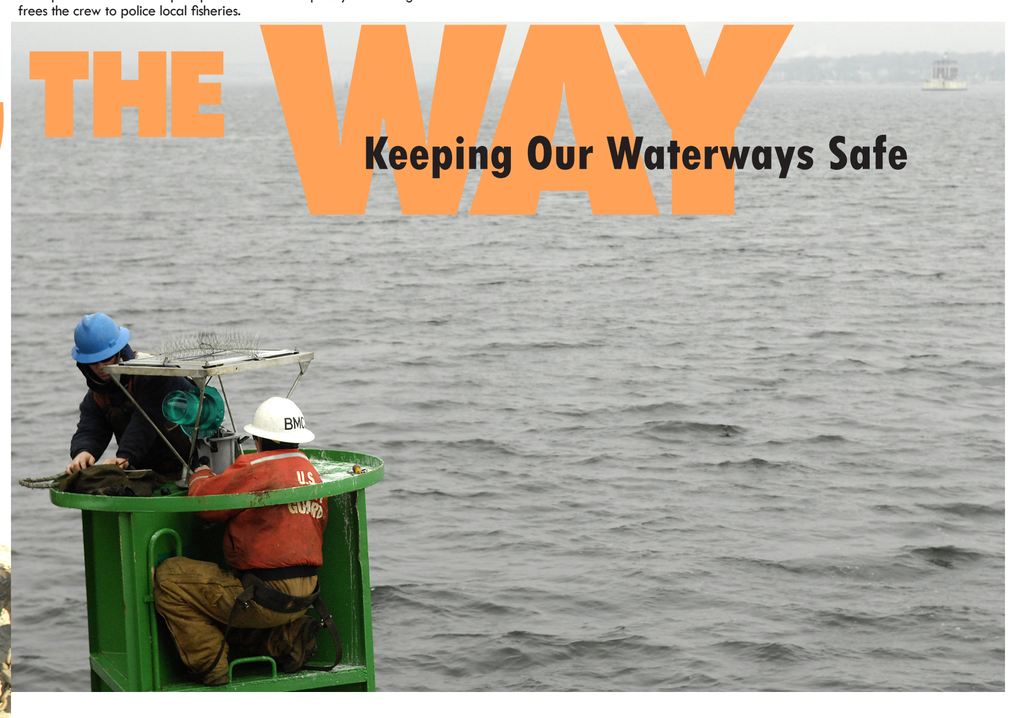
BMCS Kat McSweeney and SN Dillon Smith replace lights on the Plum Island buoy. Using new, longer-lasting LED lights for replacements lessens upkeep and frees the crew to police local fisheries.

SN Dillon Smith (left) and BMCS Kat McSweeney replace the light on a buoy on the Thames River. Replacing expired bulbs and fixing solar panels are routine maintenance jobs the crew of the Juniper is trained to do. Though this specific buoy was not in the Juniper's jurisdiction, a lookout spotted the damage and the repairs were quickly made regardless.

LEADING THE WAY

Keeping Our Waterways Safe

SN Joseph Lopez works to break the chain off a buoy anchor as (left to right) SN Savannah Sibley, SN Adam Wernicke, CWO2 Mike Tomasi and SN Bryan Collier standby. A worn section of chain had to be replaced when it was determined too weak to reliably secure the buoy to the anchor.



Photos and Story by
John Narewski, NSSF VISC

USCGC Juniper (WLB 201)

Commissioned:
July 5, 1996

Built by Marinette Marine Corporation, Marinette Wisconsin.

Length:
225 feet

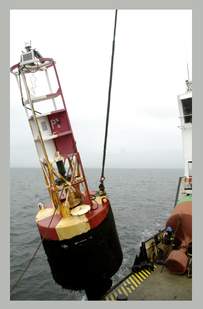
Propulsion:
Two 3,100 horsepower diesel engines

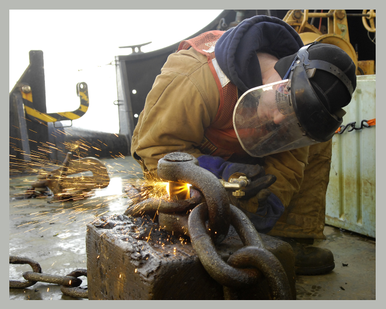
Speed:
16 knots

Displacement:
2,000 tons

Homeport:
Naval Station Newport

Crew:
40 enlisted / 8 officers





The 17,500 lb. Plum Island buoy is brought on deck while officers and crew members on the bridge use the ship's advanced control system to hold the ship's exact position next to the buoy's plotted location. Using differential GPS technology, the ship's computer adjusts thrusters, automatically taking into account such things as current, wind speed, and tides to hold it's position and allow the crew to work on the buoy more safely and efficiently then ever before.

Regardless of a buoy's impressive weight, in addition to the 20,000 lb. concrete block anchoring it to the ocean floor, these buoys can drift at sea. They can be dragged by watercraft or their chains sometimes knot and shorten excessively causing the buoy to "hop" through the water. DC1 Paul Grunwaldt (left) breaks a link on a section of chain that has to be replaced.

"It's a good job, I get to work outside and see a lot of neat things."

Mussels encrust the buoy and its chain necessitating regular cleaning as part of scheduled maintenance. Excessive growth can lead to a buoy sinking.

As United States Coast Guard Cutter Juniper (WLB 201) backs away from State Pier in New London on a chilly and foggy Friday morning Commanding Officer LCDR Rick Wester watches from his captains chair on the bridge as his crew navigates the 225 foot long vessel. The first in the class of ship that bears her name Juniper is the first cutter to utilize electronic charting, position keeping, and remote engineering monitoring and control. LCDR Wester explains the ships versatility "We do search and rescue, migrants, fisheries, ice breaking, buoy tending, homeland security… we keep busy. We see some good ports." The multiple mission capable ship has been up and down the east coast from Key West all the way up to Halifax, Nova Scotia.

On this particular morning the ships destination, a buoy off Plum Island known as PI, is put on hold as a lookout spots damage to a solar panel on a channel marker out past Ledge Light in the mouth of the Thames River. The crew, on a moments notice, makes preparations to repair the damage, as the ship makes a U-turn and pulls alone side the damaged buoy. A computer data base provides officers on the bridge information about the buoy, everything from chain length to when the buoy was last worked. A decision is made not to bring the buoy on deck but instead have Seaman Dillon Smith and Boatswain Senior Chief Kat McSweeney do the work while it is still in the water and the two make quick work of replacing the solar panel and fixing the markers light.

A little before two p.m. Juniper arrives at the Plum Island buoy and again the deck crew springs into action. This time the nine foot channel marker that weighs approximately 17, 500 lbs. is brought on board. Once on board Chief Warrant Officer 2 Mike Tomasi directs his deck force in the cleaning and upkeep of the buoy. The hull is scrubbed, chain is replaced, and new lights are installed. The deck crew works together like clock work and as the wind in Long Island Sound picks up the crane operator lowers the 20,000 lb. anchor back down into the water, followed by the buoy itself. The crew cleans the deck, the sun sets, and Juniper steams toward her home port of Naval Station Newport.

The order is given "Helmsman steer course 084" as the lights of the Claiborne Pell Bridge illuminate the night sky. The crew is called to there mooring stations while Juniper swings past two aircraft carriers that line the waterfront of the Naval Station. She pulls into her spot between USCGC Ida Lewis (WLM 551) and her sister ship USCG Willow (WLB 202). The ship is secured to the pier and brow is placed across. The mood of the crew is upbeat as they depart the ship on the clear Friday night. The general sentiment that seems to be shared by all is as SN Savannah Sibley put it "It's a good job, I get to work outside and see a lot of neat things."

SN Kyle McGann readies himself to spray down the buoy deck as Juniper pulls away from Plum Island. The temperature is dropping and they will see the sun set before their 10 hour work day is over.

JUNIPER